

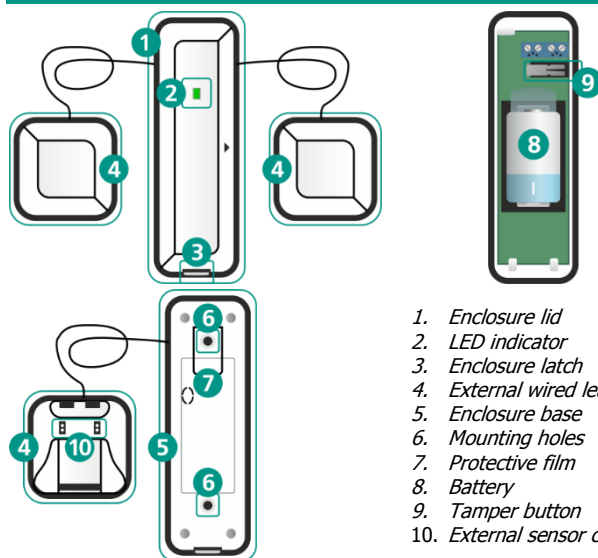
DESCRIPTION

The Livi LS water leak sensor (hereafter referred to as the sensor) is designed to detect water leakages. The sensor switches to the alarm mode when it detects a water leak:

1. the sensor indicator blinks red once;
2. the sensor sends an alarm alert to the [Livi Smart Hub](#) (hereafter referred to as the hub).

The sensor is completed with two external wired leak sensors (4) which can detect water leakage in two separate areas of potential flooding. External leak sensors are protected against false alarms caused by splashes and wet cleaning. Small dimensions allow putting sensors in difficult to reach locations.

SENSOR APPEARANCE



1. Enclosure lid
2. LED indicator
3. Enclosure latch
4. External wired leak sensor
5. Enclosure base
6. Mounting holes
7. Protective film
8. Battery
9. Tamper button
10. External sensor contacts

BINDING THE SENSOR TO THE HUB

The sensor must be unpacked and allowed to reach room temperature for at least two hours before handling if it was transported or stored at low temperatures.

1. Pull the protective film out of the battery compartment. The sensor indicator will start blinking blue once the sensor is switched to the binding mode.
2. [In the Livicom app](#), open the "Devices" screen. In the upper right corner of the screen tap **+** and select "Add Device". The sensor indicator will blink green 5 times after successful binding.

The sensor switches to the binding mode only for 60 seconds. If you have not bound it to the hub within this period, remove the battery from the sensor (see below) for 30 seconds, and reinstall it (observing polarity). The sensor will switch to binding mode again.

REMOVING OR REPLACING THE BATTERY

- Open the sensor enclosure: press one of the latches (3) on the short side of the enclosure using a flat-blade screwdriver, and then pull the lid up while pressing the latch.
- Remove the battery (8).
- Install a new CR123A battery (observing polarity) if necessary and close the sensor enclosure.

CHOOSING A LOCATION FOR THE SENSOR

The sensor can be installed in bathrooms, in the kitchen and in other areas of potential flooding.

We recommend mounting the sensor on a wall, away from water sources. External leak sensors should be fastened on the floor with contacts (10) down in areas of potential flooding (for example, under heating radiators, at pipe joints, under dishwashers or washing machines). Take in account that the length of wires between the sensor and external sensors is 1 m, when choosing the place for the sensor. The wires can be extended up to 10 m if necessary.

DO NOT install the sensor outdoors, in places with high humidity, or at temperatures exceeding the operating temperature range (see "Specifications" table).

EVALUATING SIGNAL STRENGTH

Check the quality of the connection between the sensor and the hub at the intended location of the sensor. There are two ways to evaluate the signal strength:

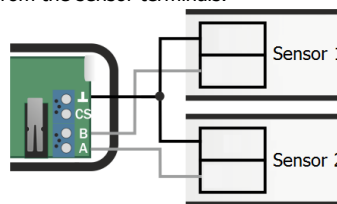
1. In the Livicom app, on the sensor settings screen.
2. With the help of the LED indication on the sensor. Double-click on the tamper button and look at the sensor indicator. Interpret the indication using the table below.

Good signal	The indicator blinks green 3 times
Average signal	The indicator blinks green twice
Poor signal	The indicator blinks green once
No connection	The indicator blinks red 4 times

CHANGING WIRES FOR CONNECTING EXTERNAL LEAK SENSORS

Wires for connecting external leak sensors to the sensor can be changed if necessary. Follow these steps to change wires:

1. Select new wires (recommended wire cross-section is 0,12 mm²)
2. Open the sensor enclosure: press one of the latches (3) on the short side of the enclosure using a flat-blade screwdriver and then pull the lid up while pressing the latch. Remove the wire from the sensor terminals.
3. Open the sensor enclosure: press one of the latches located near the wire using a flat-blade screwdriver, and then unsolder wires from the pad.
4. Connect sensors with new wires as shown on the connection diagram.
5. Close all enclosures.



SENSOR INSTALLATION

1. Open the sensor enclosure: press one of the latches (3) on the short side of the enclosure using a flat-blade screwdriver and then pull the lid up while pressing the latch.
2. Fasten the base of the sensor enclosure at the selected location using a supplied mounting kit.
3. Close the sensor enclosure.
4. Fasten external wired leak sensors on the floor with contacts down at the selected location using an adhesive tape from the supplied mounting kit.

CHECKING THE SENSOR OPERATION

Check the operation of the sensor after its installation. You can perform a check by short-circuiting 2 groups of the sensor contacts (10) with water or a metal object (for example, a screwdriver). Wait for the LED indication (the sensor indicator should blink red once) and for the alarm alert in the Livicom app. The sensor will automatically recover (the indicator will blink green once), after the sensor contacts opening (leak elimination).

Contact technical support (mail to: support@livicom.ru) if you see an incorrect indication or do not receive the alert.

DELETING THE SENSOR (UNBINDING FROM THE HUB)

There are two ways to unbind the sensor from the hub:

1. In the Livicom app, on the sensor settings screen.
2. Using the tamper button (9). Remove the battery from the sensor for 30 seconds, then press the tamper button and while holding it, reinstall the battery, observing polarity. Release the tamper button and quickly click on it until the sensor indicator starts blinking blue.

SENSOR MAINTENANCE

Keep the sensor free of dust and dirt. Replace the battery as soon as possible after you receive a low battery notification in the Livicom app.

Attention

Do not wipe the sensor with substances containing alcohol, acetone, gasoline and other active solvents

SPECIFICATIONS

Operating frequency	868 MHz
Guaranteed operating range in open areas	up to 1000 m
Radio channel power	25 mW
Number of external leak sensors	2
External leak sensor wire length	1 m
Maximum length of external leak sensors wires	10 m
Recovery period after an alarm (if no more water)	10 sec
Current consumption in sleep mode	3 µA
Current consumption in operation mode	up to 30 mA
Power source (3 V)	battery CR123A
Battery life	10 years
Operating temperature range	from 0 to +55 °C
Relative humidity	no more than 80% at 25 °C
Dimensions	90 x 28 x 28 mm
External water leak sensor dimensions	35 x 35 x 13 mm

SUPPLY SET

Livi LS water leak sensor	1
Livi LS C external water leak sensor	2
Mounting kit	1
Lithium battery CR123A (3 V)	1
Protective film for the battery	1
Packaging	1

LED INDICATION

Water leak detected	The indicator blinks red once
Sensor recovered after an alarm (no more water)	The indicator blinks green once
Binding mode	The indicator blinks blue for 1 minute
Confirmation of successful binding	The indicator blinks green 5 times

WARRANTY

The manufacturer LLC "NPP Stels" guarantees that the sensor meets AGNS.421453.001 TU technical requirements, provided that the consumer complies with the conditions of transportation, storage, installation and operation. The warranty period is 5 years from the manufacturing date. The warranty does not apply to batteries.

The warranty does not cover the following cases:

1. Non-compliance with the intended operating conditions;
2. Mechanical damage to the sensor;
3. Repairs to the sensor by a third party (a person or a company other than the Manufacturer).